ABSTRACT

A method of preparing a xylene product is carried out by providing a reactor containing a non-steamed, phosphorus-treated ZSM-5-type zeolite catalyst. The catalyst is contacted with a toluene/methanol feed and a cofeed of hydrogen under reactor conditions suitable for the methylation of toluene. Water is introducing into the reactor during the methylation reaction under conditions that provide substantially no structural aluminum loss of the catalyst from such introduction of water.